

Common Cysteine Backbone

1					50
human-gremlin.pro	-----	-----	-----	-----	-----
human-cerberus.pro	MHLLLFQLLV	LLPLGKTTRH	QDGRQNQSSL	SPVLLPRNQR	ELPTGNHEEA
human-dan.pro	-----	-----	-----	-----	-----
human-beer.pro	-----	-----	-----	-----	-----
	51				100
human-gremlin.pro	-----	-----	M SRTAYTVGAL	LLLLGTLLPA	AEGKKKGSQG
human-cerberus.pro	EKPDLFVAV	PHLVAT.SPA	GEGQRQREKM	LSRFGRFWKK	PEREMHPSRD
human-dan.pro	-----	-----	-----	-----	-----
human-beer.pro	-----	-----	-----	-----	-----
	101				150
human-gremlin.pro	AI.PPPDKAQ	HNDSEQTQSP	QQPGSRNRGR	GQGRGTAMPG	EEVLESSQEA
human-cerberus.pro	SDSEFPFPGT	QSLIQPID.G	MKMEKSPLRE	EAKKFVHHFM	FRKTPASQGV
human-dan.pro	-----	-----	-----	MLRVLVGAVL	PAMLLAAPP
human-beer.pro	AFRVVEGQGW	QAFKNDATEI	IPELGEYPEP	PPELENNKTM	NRAENGGRPP
	151				200
human-gremlin.pro	LHVTERKYLK	RDWCKTQPLK	QTIHEEGCNS	RTIINRF.CY	GQCNSFYIPR
human-cerberus.pro	ILPIKSHEVH	WETCRTVPFS	QTIHEGCEK	VVQNNL.CF	GKCGSVHFP.
human-dan.pro	INKLALFPDK	SAWCEAKNIT	QIVGHSGCEA	KSIQNRA.CL	GQCFSYSVPN
human-beer.pro	HHPFETKDVS	EYSCRELHFT	RYVTDGPCRS	AKPVELVCS	GQCGPARLLP
	201				250
human-gremlin.pro	HIRKEEGSFQ	SCSF...CKP	KKFTTMMVTL	NCPQLQPPTK	K.KRVTRVKQ
human-cerberus.pro	..GAAQHSHT	SCSH...CLP	AKFTTMHLPL	NCTELSSVIK	V...VMLVEE
human-dan.pro	TFPQSTESLV	HCDS...CMP	AQSMWEIVTL	ECPGHVEEVR	VDKLVEKILH
human-beer.pro	NAIGRGKWWR	PSGPDFRCIP	DRYRAQRVQL	LCPGGEAPRA	RKVRLVAS..
	251				300
human-gremlin.pro	CRC.ISIDLD	-----	-----	-----	-----
human-cerberus.pro	CQCKVKTEHE	DGHILHAGSQ	DSFIPGVSA~	-----	-----
human-dan.pro	CSCQACGKEP	SHEGLSVYVQ	GEDGPGSQPG	THPHPHPHPH	PGGQTPEPED
human-beer.pro	CKCKRLTRFH	NQSELKDFGT	EAARPQKGRK	PRPRARSAKA	NQAELENAY~
	301	314			
human-gremlin.pro	-----	-----			
human-cerberus.pro	-----	-----			
human-dan.pro	PPGAPHTEEE	GAED			
human-beer.pro	-----	-----			

Fig. 1

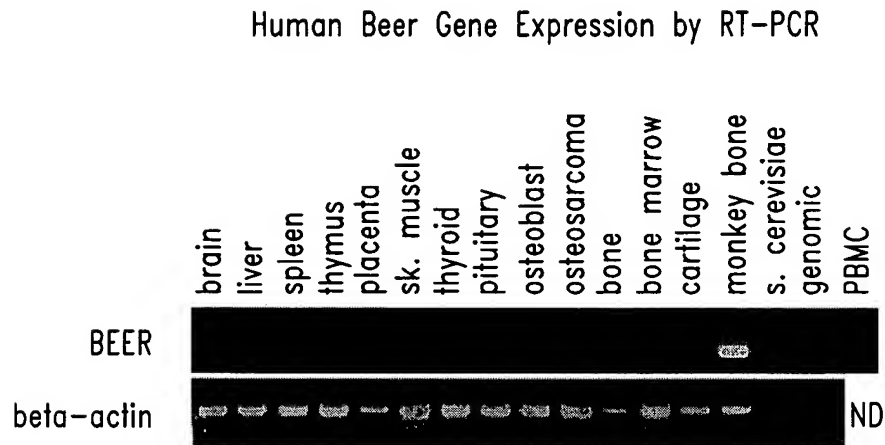


Fig. 2

RNA In Situ Hybridization of Mouse Embryo Sections

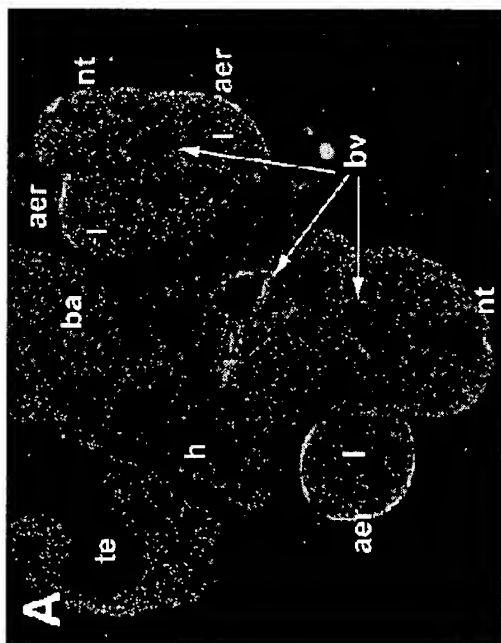


Fig. 3A

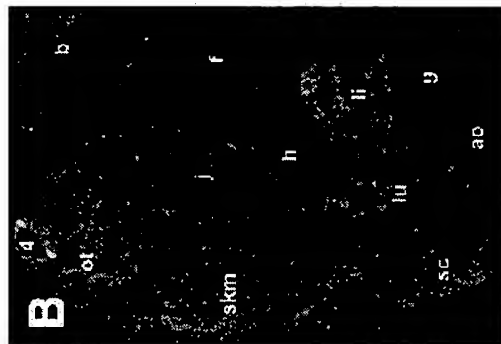


Fig. 3B

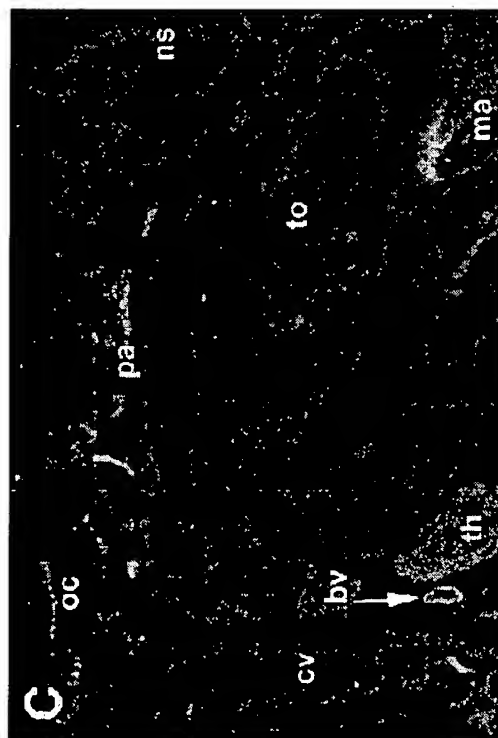


Fig. 3C



Fig. 3D

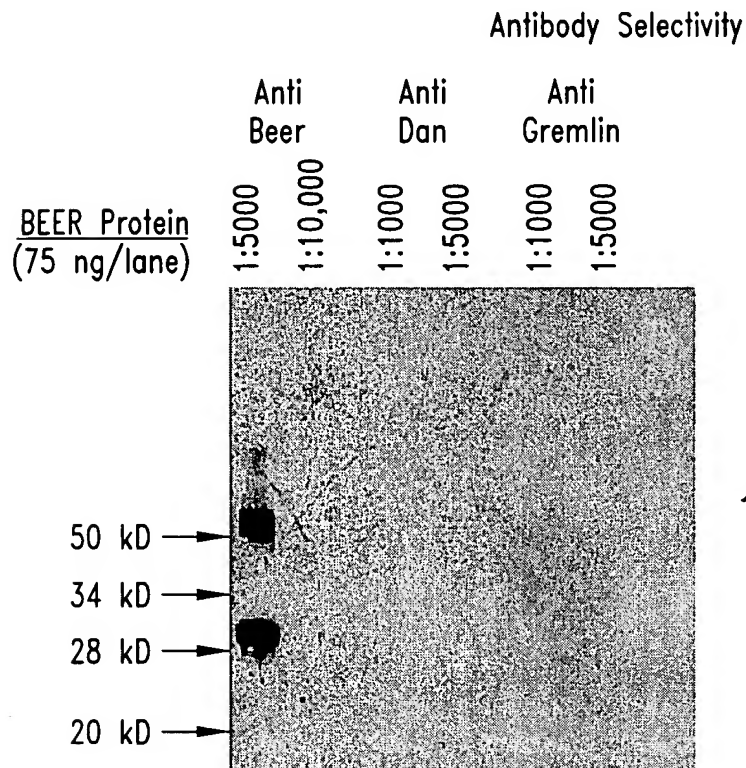


Fig. 4A

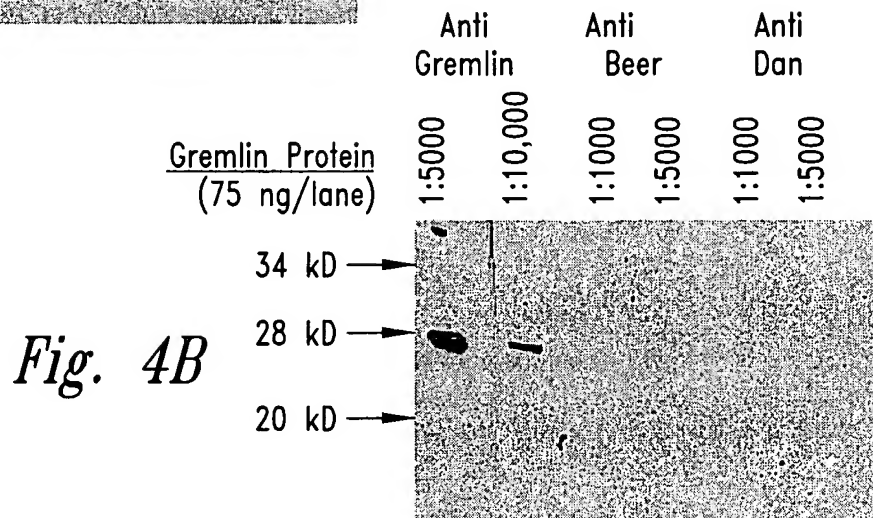


Fig. 4B

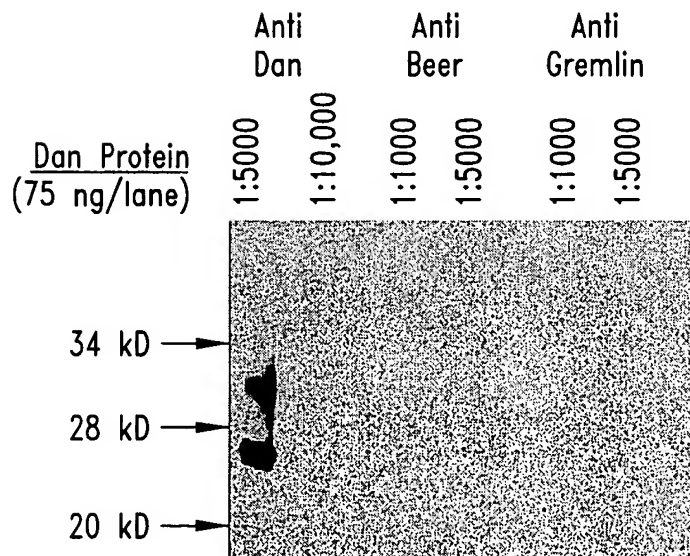


Fig. 4C

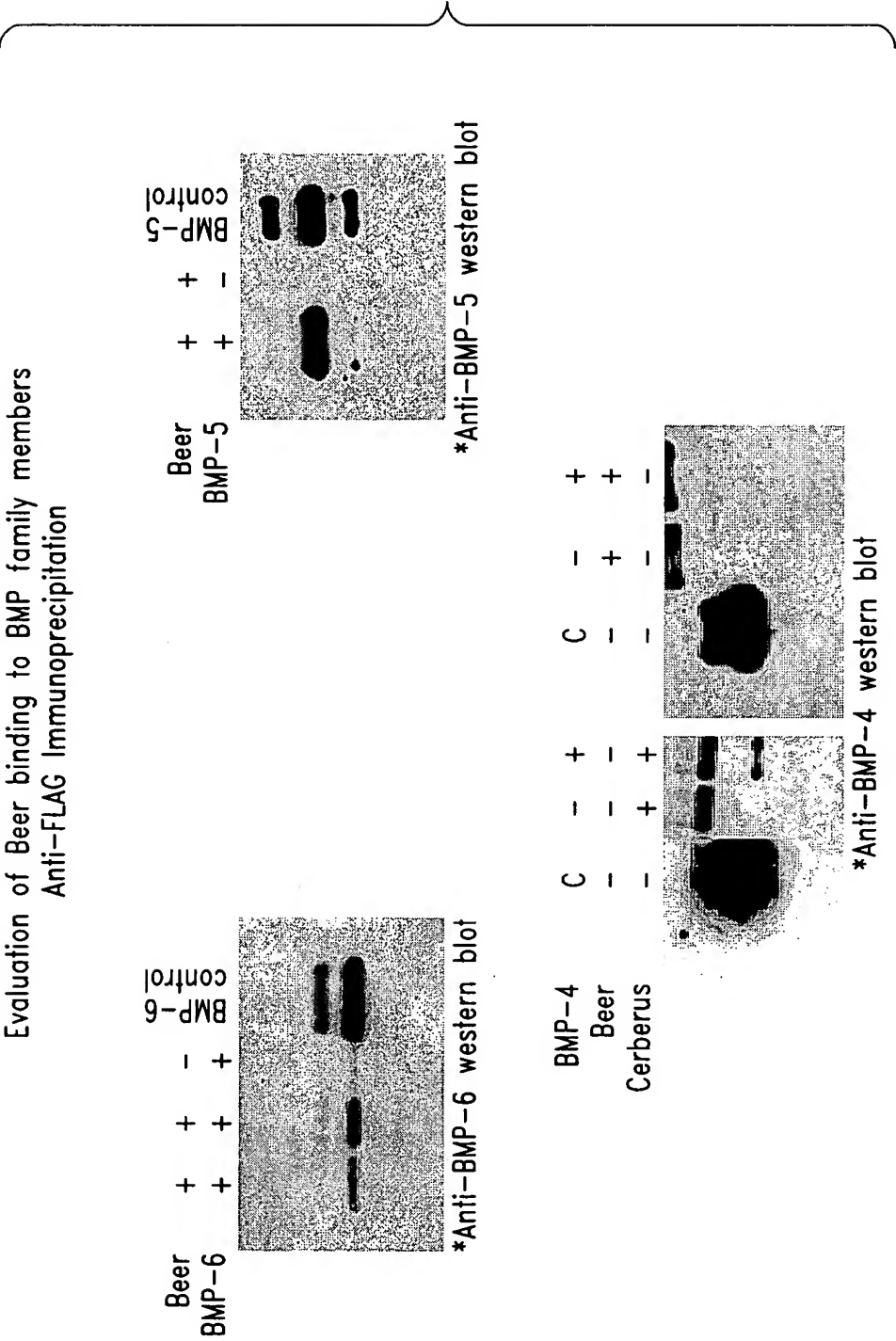


Fig. 5

BMP-5/Beer Dissociation Constant Characterization

.75 1.5 7.5 15 30 60 120 nM BMP-5



*Anti-FLAG immunoprecipitation
*Anti-BMP-5 western blot

Ionic Disruption of BMP-5/Beer Binding

NaCl(mM)	500	150	150	BMP-5	western
Beer	+	+	-		control
BMP-5	+	+	+		



*Anti-FLAG immunoprecipitation
*Anti-BMP-5 western blot

Fig. 6